**Supplemental Table 5: Generated coding framework for determinants of dietary behavior**

|  |  |  |
| --- | --- | --- |
| **Themes** | **Categorization of codes** | **Generated codes from responses (first FGD)** |
| **Convenience** | Ease of food storage | Easy storage of eggs |
| Vegs not easy to store |
| Ease of food preparation | Easy preparation of eggs |
| Children find that cooking rice is easy |
| Buy something which takes short preparation time |
| Cumbersome to prepare vegetables |
| Veg preparation process long |
| Not convenient to prepare vegs at hostel |
| Need for ready to eat foods | Desire for ready to eat foods; rolex (chapati rolled with fried eggs), soda |
|  |  |
| Time | Busy schedule | Limited time for meal preparation- choose ready to eat foods |
| Depends on time if not busy I eat food, if busy I take drink/Rolex |
| Limited time in morning during weekdays to prepare breakfast |
|  |  |  |
| Sensory attributes | Foods considered healthy not tasty | Pineapples sour and ate a lot of watermelon in childhood and got tired of it |
| Beet root has a bad taste |
| Some vegs – nakati, round eggplant are bitter |
| Whole wheat bread not tasty |
| Boiled food un-tasty |
|  |  |
| Unhealthy foods tasty and visually appealing | Pizza is tasty and delicious |
| Deep fried chicken is enticing |
| Fries taste better than boiled potatoes |
| Like white bread b’se it is sweet |
| I don’t boil, I like taste of frying |
| No consideration of health, taste comes first |
|  |  |  |
| Psychological satisfaction | Psychological satisfaction | Eat according to cravings/moods of the day |
| No consideration of health, mood comes first |
| Mainly crave for foods considered unhealthy |
| Enjoyment | I eat what I enjoy eating – enjoy white bread |
|  |  |
| Physiological satisfaction | Physiological demand | Eat when I feel hungry |
| Satiating (stomach filling) foods | Consider heavy-satiating (stomach filling) foods |
| Main goal of eating is to get satisfied |
| Rolex (sandwich of chapati and fried eggs), beans, carbohydrate rich foods (staples) considered satiating |
| Fruits & Vegs not satisfying |
|  |  |  |
| Social environment | Children health consideration | Good health for children |
| Desire of child to get used to every type of food |
| Ask children because they are picky |
|  |  |
| Mothers influence | Parents decide what to eat |
| Mother decides what we eat |
| Like vegs b’se from childhood my mother used to like them |
| Adopted food preparation methods from mother |
| Role Models | Dietary advises from mentor/ women group leader |
| Encouraged by my mentor to change from junk food to traditional foods |
| Community group structures | Social networks (groups with similar goal) – source of nutrition information - nutritional WhatsApp groups |
| Dietary advise received through village women groups through village women leaders |
| Peer Influence | Learnt benefits of eating greens through peers |
| Peer pressure – how can I swag on WhatsApp with boiled potatoes |
| Advise from friends |
| Children ask for fries and ice cream b’se they saw others eating so you buy for them |
|  |  |  |
| **Household size/composition** | Household size/composition | Big family size – limited budget to consider fruits |
| Large family can’t just prepare simple vegetables |
| Living alone – lazy to cook food for one - more consumption of ready to eat street foods |
| Living alone – eat simple meals & no bother about greens |
| Household composition | Working mothers |
| Finances | Food choice planned according to available finances | Decide what to eat according to available money |
| Limited budget – eat more affordable foods but with high satiety value – carbohydrate staples, ready to eat street foods |
| Good economic situation – eat more meat and high socially regarded foods (mostly unhealthy) |
| Compensation (eating foods couldn’t afford while at school) |
| Food price | Cow boy (cooking fat) affordable compared to cooking oil |
| Buy affordable local foods (beans & posho), |
| Vegs are affordable but associated with poverty and low satiety value |
| Cost of cooking fuel | Available cooking fuel |
| Physical food environment | No available fruits & vegs offers at eat outs, mainly fast foods | No vegs at hostel |
| At eat outs vegs served as side dish (little amounts) |
| No local foods at university campus in evening |
| Local restaurants with local healthy foods scarce |
| Increase in energy dense processed and street foods (rich in sugar, salt & fat) | Only packaged and processed foods available |
| Localities mainly composed of deep-fried chicken and fries |
| Environment full of carbohydrate rich foods |
| Soda, chapati, samosas, French fries and rolex found everywhere anytime of the day |
| Fruits and vegs only available in traditional markets but markets are far away from residences | Veg intake depends on market distance |
| Lazy to go to market to buy fruits |
| Markets where fruits & vegs are sold are far |
| Fruits accessed mainly in markets |
|  |  |
| Un-availability of pre-prepared fresh cut F&V | No available quality packed fresh cut vegs |
|  |  |  |
| **Food skills** | Limited veg cooking skills | Eat a range of green vegetables by pasting in gnuts - people from Northern Uganda |
| Vegs prepared by frying (people from central Uganda) |
| Vegs not cooked well thus no tasty |
|  |  |
| Food preparation skills | Mix beans with oddi to make beans likable |
| Limited cooking skills when growing up |
| Unawareness of advantages/disadvantages of different preparation methods |
| Using natural spices can improve taste and aroma of food |
| Low skills to evaluate dietary advice | Dietary advise taken as received – no evaluation |
| Food self-efficacy | Low self-efficacy to financially manage and prepare balanced diet | Un-ability to describe healthy diets on minimal budget |
| Balanced diet expensive |
| Preparing a balanced diet takes a long time |
| Nutrition knowledge increases self-efficacy | Knowing nutritional benefits of healthy foods key for consumption |
| Nutrition knowledge key to eating healthy foods associated with poverty |
| Food and nutrition knowledge | Nutrition Knowledge | Cake, rolex (sandwich of chapati and fried eggs), pizza, French fries, deep fried chicken, red meat, sausage, soda, processed juice – unhealthy; contain lots of oil, sugar, artificial spices and colorants |
| Fruits & vegs, pasting and boiling foods, legumes, water, homemade juice – considered healthy |
| Benefits fruits & vegetables – improves general immunity, keeping skin shinny and young, detoxify body, increase blood levels & improve sight |
| Hot water and lemon burn stomach fat |
| Water cleanses body system |
| Direct relation of sugar intake to type 2 diabetes |
| Non distinction between healthy cooking oils and unhealthy cooking fats |
| Limited knowledge on healthy profile of whole wheat bread compared to white bread |
| Animal based protein sources regarded as only source of protein |
| Misconception that a food which is sweet is unhealthy |
| Late night meals cause type 2 diabetes |
| Misconception that wheat intake causes type 2 diabetes |
|  |  |
| Food Knowledge | Food group dietary diversity knowledge scanty |
| Balanced diet interpreted in terms of variation of carbohydrate staples |
| Mix up of balanced diet and healthy eating concepts |
| Don’t know WHO daily recommendations for fruits |
| Don’t know WHO daily recommendations for vegetable |
| Misconceptions about food storage - foods loose nutritional value in storage, in refrigeration |
|  |  |
| Definition of healthy diet | Healthy diet is diet rich in vegs, & low in oily foods like meat |
| It’s a balanced diet where you include some vegs and fruits |
| Level of consumption makes food healthy or unhealthy |
| Healthy diet mainly consists of lots of greens and low animal-based protein |
| Eating healthy is when I eat and get satisfied |
| Healthy diet interpreted as not frying |
|  |  |  |
| Cultural norms | Vegs are a side-dish | Culture of serving vegs as a side dish in little amounts |
| Culturally we are not used to vegs, we are not like whites |
| High social status accordance to animal-based protein, fast foods and eating at fast-food outlets | High social status accordance to animal-based protein |
| Competition with neighbor – is always eating chicken, how will she see me eating beans always |
| High social status accordance to deep fried chicken and fries |
| Soda associated with celebration parties |
| High social status accordance to fast food chains |
| Low social status accordance to vegs | Vegs for poor - greens eaten when not in good financial situation |
| We don’t eat leaves |
| Green vegs, and non-fried foods are for the poor |
| Neighbors talk about you if they see you eating African eggplant a lot |
|  |  |
| Fruits not food, snack | Fruits not food  Fruits eaten as a snack not on meals  Fruits are for children |
| Culturally low fruit & veg consumption | Acknowledgment of low fruit & veg consumption |
| Eat veg less than three times a week |
| Culturally oriented towards carbohydrate rich foods | Culturally carbohydrate staple regard as the only food |
| Food is posho, matooke, rice |
| Carbohydrate foods take the vast portion of the plate |
| Food safety concerns | Microbial safety | Poor quality hygiene of available prepacked/prepared fresh cut vegs |
| Street vended fresh cut fruits hygienically unclean |
| Belief that vegs are grown near pit latrines thus unhygienic |
| Chemical food safety | Fear of pesticide residues on fruits & vegs |
| Milk healthy but health concerns over antibiotic residues and chemical preservatives |
| Fear GMOs - genetically modified chicken, fruits – fear chemicals, |
| Domesticated fish and exotic chicken are grown cancer causing chemicals |
| Oil recycling (chicken deep fried in recycled oil) |
| Health concerns over preservatives and other chemicals used in processed juice |
| Health concerns over groundnuts centrally grinded at small scale grinders – contain metal fillings & molds |
| Street foods & restaurant foods cooked in polyethene bags without knowledge of health effects |
|  |  |  |
| Outcome expectations | Health concerns | Heart problems - recommendations from Dr to change diet. |
| Avoid fatty foods b’se of risk of heart attack |
| Cooking oil related to hypertension and cardiac arrest, fat tummy & pimples |
| Limiting sugar b’se it causes diabetes |
| Take hot water with lemon to detoxify |
| Always take water b’se it helps cleaning body |
| Limit soda & sugar - cause weight gain |
| Eat healthy because of fear of diseases suffered by relatives or close friends | Adverse health conditions to relatives |
| Body and facial outlook (beauty) | Negative weight gain perception – weight gain rebuked by friends |
| Weight gain status informs food choices - Only mind about diet when am growing fat. |
| Moderating fried foods, cooking oil and kimbo, fats - cause pimples |
| Water & juice makes skin shinny |
|  |  |  |
| Virtual environment | Online information- social media | Online nutrition information sources |
| Nutritional groups on WhatsApp |
| Main stream media information | Healthy talk shows on Tv and Radio |
| Seasonality | Seasonality | Fruits & vegetables are seasonal, eat more when in season |
| Eat mangoes according to season |
| Beans expensive when out of season |
| Like pears but come in seasons |